## APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEC'	TION I: BACKGROUND INFORMATION
A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 15 August 2008
В.	DISTRICT OFFICE: San Francisco District FILE NUMBER: 1991-194740N  File Name: Willits By-Pass Project, Supplemental Delineation (Embankment Creek)  Waterbody Name: Streams S-1 thru S-5, Wetlands WM-1 thru WM-3
c.	PROJECT LOCATION AND BACKGROUND INFORMATION:  State: California County/parish/borough: Mendocino Co. City: Willits
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):  ☐ Office (Desk) Determination. Date:  ☐ Field Determination. Date(s): 13 February 2008
<u>SEC'</u> A.	TION II: SUMMARY OF FINDINGS  RHA SECTION 10 DETERMINATION OF JURISDICTION.
В.	There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required].  Waters subject to the ebb and flow of the tide.  Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:  CWA SECTION 404 DETERMINATION OF JURISDICTION
	<ul> <li>a. Indicate presence of waters of U.S. in review area (check all that apply): 1  TNWs, including territorial seas</li> </ul>
	Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area  Non-wetland waters: linear feet: width (ft) and/or 0.393 acres. (other comments: Streams S-1 thru S-5)  Wetlands: 1.393 acres. (other comments: Wetlands WM-1 thru WM-3)
	<ul> <li>Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual</li> <li>Elevation of established OHWM (if known): 1-2 feet above creekbed.</li> </ul>
	2. Non-regulated waters/wetlands (check if applicable):  Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. <i>Explain:</i>

Boxes checked below shall be supported by completing the appropriate sections in Section III below.

For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

Supporting documentation is presented in Section III.F.

## SECTION III: CWA ANALYSIS

## A TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

#### 1. TWR

Identify TNW:

Summarize rationale supporting determination that waterbody is a TNW:

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

#### B CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

#### 1. Characteristics of non-TNWs that flow directly or indirectly into TNW

#### (i) General Area Conditions:

Watershed size: Eel River Watershed Pick List

Drainage area: Unknown acres
Average annual rainfall: 53 inches
Average annual snowfall: 0 inches

#### (ii) Physical Characteristics:

#### a. Relationship with TNW:

Tributary flows directly into TNW

Tributary flows through 2 tributaries before entering TNW

Project waters are 20-25 river miles from TNW. Eel River

Project waters are 1 (or less) river miles from RPW. Streams S-1 thru S-5 are RPWs.

Project waters are  $\,$  Pick List  $\,$  aerial (straight) miles from TWN.

Project waters are Pick List aerial (straight) miles from RPW.

Project waters cross or serve as a state boundary. Explain:

Identify flow route to  $TNW^5$ : Streams S-1 thru S-5 to unnamed creek, to Outlet Creek, to Eel River (TNW). Tributary stream order, if known: Unknown.

## b. General Tributary Characteristics (check all that apply)::

TET *1 4	•
Iribiifory	10
Tributary	10.

$\boxtimes$	Natural: (comment if needed	
	Artificial (man-made): Explain:	

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>&</sup>lt;sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW. ud080207 HED

	Manipulated (man-altered): <i>Explain:</i> Streams have shoulders.	been s	straightened and aligned along road
Tributai	ry properties with respect to top of bank (estimate):		
Ave	erage width: 2 feet (measured from top of bank to top	of ban	k)
	erage depth: 2 feet. (measured from OHWM to top of berage side slopes: 3:1 (vertical: horozontal)	oank)	
Primary	ributary substrate composition (check all that appl	y):	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Silt: Sand: Clay: Cobbles: Gravel: Muck: Bedrock: Concrete: Vegetation (Type / % cover): Other (Explain): y condition/stability [e.g., highly eroding, sloughing bar	nks]. <i>E</i>	Explain: Fairly stable to somewhat eroding
banks.			
	e of run/riffle/pool complexes. <i>Explain</i> : None.		
-	y geometry: Relatively Straight .		
Tributary	y gradient (approximate average slope): 1-2 %		
FLOW I	NFORMATION		
Estimate Describe Other inf Surface f	y provides for: Seasonal flow average number of flow events in review area/year: 20 a flow regime: Streams S-1 thru S-5 exhibit continuo formation on duration and volume: flow is: discrete and confined. Characteristics: What ace flow: Pick List. Explain findings:  Dye (or other) test performed:	us flow	during winter and spring months.
Tributary	y has (check all that apply):  Bed and banks  OHWM <sup>6</sup> (check all indicators that apply):		
	<ul> <li>□ clear, natural line impressed on the bank</li> <li>□ changes in the character of soil</li> <li>□ destruction of terrestrial vegetation</li> <li>□ vegetation matted down, bent, or absent</li> <li>□ leaf litter disturbed or washed away</li> <li>□ multiple observed or predicted flow events</li> <li>□ water staining</li> <li>□ abrupt change in plant community. <i>Explain</i>:</li> <li>□ other (list):</li> </ul>		the presence of litter and debris shelving the presence of wrack line sediment sorting scour sediment deposition
	Discontinuous OHWM. Explain:		
If factors	s other than the OHWM were used to determine lateral		of CWA jurisdiction ( <i>check all that apply</i> ): igh Water Mark indicated by: survey to available datum physical markings vegetation lines/changes in vegetation types

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<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iii)	Chemical Characteristics:		
		Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics etc.). Explain:		
		Identify specific pollutants, if known:		
	(iv)	Biological Characteristics. Channel supports (check all that apply):		
		<ul> <li>□ Riparian corridor. Characteristics (type, average width):</li> <li>□ Wetland fringe. Characteristics: Streams S-2 thru S-5 contain abutting wetlands.</li> <li>□ Habitat for:</li> <li>□ Federally Listed species. Explain findings: None.</li> <li>□ Fish/spawn areas. Explain findings: None.</li> <li>□ Other environmentally-sensitive species. Explain findings:</li> <li>□ Aquatic/wildlife diversity. Explain findings:</li> </ul>		
2.	Chara	acteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW Present, described below		
	(i)	Physical Characteristics:		
		(a) General Wetland Characteristics:  Properties  Wetland size: 1.393 acres  Wetland type. Explain: Seasonal wetlands.  Wetland quality. Explain: Disturbed and undisturbed.  Project wetlands cross or serve as state boundaries. Explain: No		
		(b) General Flow Relationship with Non-TNW:  Flow is: Intermittent Flow Explain: Wetlands WM-1 thur MW-3 exhibit seasonal flow.  Surface flow is: Discrete and Confined  Characteristics: Somewhat wet.  Subsurface flow: Unknown Explain findings:  Dye (or other) test performed:		
		(c) Wetland Adjacency Determination with Non-TNW:  ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm / barrier. Explain:		
		(d) Proximity (Relationship) to TNW  Project wetlands are 20 - 25 river miles from TNW.  Project waters are: Pick List aerial (straight) miles from TNW.  Flow is from: wetland to navigable waters  Estimate approximate location of wetland as within the: 10 - 20-year floodplain.		
	(ii)	Chemical Characteristics:		
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). <i>Explain</i> :		
		Identify specific pollutants, if known: <i>Explain</i> :		
	(iii)	Biological Characteristics. Wetland supports (check all that apply):		
		<ul> <li>□ Riparian buffer. Characteristics (type, average width): None</li> <li>□ Vegetation type/percent cover. Explain: Fully vegetated by hydrophytic plant species.</li> <li>□ Habitat for:</li> <li>□ Federally Listed species. Explain findings: None.</li> <li>□ Fish/spawn areas. Explain findings: None</li> <li>□ Other environmentally-sensitive species. Explain findings:</li> <li>□ Aquatic/wildlife diversity. Explain findings:</li> </ul>		

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3. Characteristics of all wetlands adjacent to the tributary (if any)

- (i) All wetland(s) being considered in the cumulative analysis: 3
- (ii) Approximately (1.393) acres in total are being considered in the cumulative analysis.
- (iii) For each wetland associated with the reach or waterbody being analyzed in this form, specify the following:

Number/Name <sup>8</sup>	Directly abuts	(Yes/N	o) Size
WM-1		Yes	0.364 acres
WW-2		Yes	0.019 acres
WW-3		Yes	1.010 acres
		Pick	acres
		Pick	acres
		Pick	acres

Number/Name	Directly abuts (Yes/No) Size	
	Pick	acres

(iv) Summarize overall biological, chemical and physical functions being performed: There are many potential biological, chemical, and physical functions being performed by the on-site wetlands including: biogeochemical cycling (i.e. biologic, physical, and chemical transformations of various nutrients within the soils and water), flood desynchronization (i.e. providing for receiving, storing, and releasing of water), biodiversity (i.e. environmental variation which provides for diverse plant and animal habitat), intercepting surface runoff and removing or retaining inorganic nutrients, processing organic wastes, and reducing suspended sediments delevered to downstream waterways, and ground water replenishment. No specific studies have been completed to determine which of the above mentioned functions and values are being performed. In addition, the magnitude at which these functions are being preformed is unknown.

## C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

**Note**: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. *Explain* findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D

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<sup>&</sup>lt;sup>8</sup> In the Number/Name column, add the number and/or name that you have given the wetland being referred to in the table. Example, you are referring to a wetland on your wetland delineation map number 6, that you call wetland No.3 on a reach you refer to as Putah Creek. For this wetland you would add to the table in the Number/Name column, something like the following: (No. 3, Putah Ck., Map # 6). ud080207 HED

- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3 Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

<b>D</b>		TERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL AT APPLY):
	1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
ш		TNWs: linear feet width (ft), and/or acres.
		Wetlands adjacent to TNWs: acres.
$\boxtimes$	2.	RPWs that flow directly or indirectly into TNWs.
		Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
		Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: Restricted precipitation patterns, and the presence of sediment deposits, scouring, and shelving that characterized the existence of a stable OHW mark, are likely indicatros of continuous water flow in the streams for a
		minimum 3-month period during the winter and spring.  Provide estimates for jurisdictional waters in the review area (check all that apply)
		☐ Tributary waters: 400-500 linear feet 2 width (ft).
		Other non-wetland waters: acres.
		Identify type(s) of waters: .
	3.	Non-RPWs <sup>9</sup> that flow directly or indirectly into TNWs.
		Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
		Provide estimates for jurisdictional waters within the review area (check all that apply):
		Tributary waters: linear feet width (ft).
		Other non-wetland waters: acres.
		Identify type(s) of waters: .
	4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
		Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
		Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in <b>Section III.D.2</b> , above. Provide rationale indicating that wetland is directly abutting an RPW: .
		Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in <b>Section III.B</b> and rationale in <b>Section III.D.2</b> , above. Provide rationale indicating that
		wetland is directly abutting an RPW: Wetlands WM-1 thru WM-3 are situated partially below and above OHW of the streams.
		Provide acreage estimates for jurisdictional wetlands in the review area: 1.393 acres.
	5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.
		Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at <b>Section III.C</b> .

<sup>&</sup>lt;sup>9</sup>See Footnote # 3. **ud080207** *H&D* 

	6	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.
	6.	Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at <b>Section III.C</b> .
		Provide estimates for jurisdictional wetlands in the review area: acres.
	7.	Impoundments of jurisdictional waters. <sup>10</sup>
		As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
		Demonstrate that impoundment was created from "waters of the U.S.," or
		Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
		Demonstrate that water is isolated with a nexus to commerce (see E below).
E.	DE	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS ( <i>CHECK ALL THAT APPLY</i> ): <sup>11</sup>
		which are or could be used by interstate or foreign travelers for recreational or other purposes.
		from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
		which are or could be used for industrial purposes by industries in interstate commerce.
		Interstate isolated waters. Explain: .
		Other factors. Explain: .
		Identify water body and summarize rationale supporting determination:
		Provide estimates for jurisdictional waters in the review area ( <i>check all that apply</i> )
		Tributary waters: linear feet width (ft).
		Other non-wetland waters: acres.
		Identify type(s) of waters: .
		Wetlands: acres.
F.	NO	N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
		If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
		Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
		Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based
		<ul> <li>solely on the "Migratory Bird Rule" (MBR).</li> <li>Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. <i>Explain</i>:</li> </ul>
		Other: (explain, if not covered above):
		Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment ( <i>check all that apply</i> ):
		Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
		Lakes/ponds: acres.
		Other non-wetland waters: acres. List type of aquatic resource: .
		Wetlands: acres.

acres.

Provide acreage estimates for jurisdictional wetlands in the review area:

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To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

11 Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

# **SECTION IV: DATA SOURCES.**

A.		ORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where ed and requested, appropriately reference sources below):
		Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Figures 3 thru 6, revised March 2008.
		Data sheets prepared/submitted by or on behalf of the applicant/consultant.
		Office concurs with data sheets/delineation report. Based on field review of 13 February 2008.
		Office does not concur with data sheets/delineation report.
		Data sheets prepared by the Corps: .
		Corps navigable waters' study: Navigable Waters, 2 August 1971.
		U.S. Geological Survey Hydrologic Atlas: .
		USGS NHD data.
		USGS 8 and 12 digit HUC maps.
		U.S. Geological Survey map(s). Cite scale & quad name: Willits Quadrangle.
		USDA Natural Resources Conservation Service Soil Survey. Citation: .
		National wetlands inventory map(s). Cite name: .
		State/Local wetland inventory map(s): .
		FEMA/FIRM maps: .
		100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
		Photographs: Aerial (Name & Date): Google aerials, undated.
		Other (Name & Date): Site photographs, circa June 2006.
		Previous determination(s). File no. and date of response letter: File No. 2004-194741, 1 March 2005.
		Applicable/supporting case law: .
		Applicable/supporting scientific literature: .
		Other information (please specify): .
В.	ADDI	TIONAL COMMENTS TO SUPPORT JD:

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